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Scientific Papers

- + S 34 Spectrum Lines as Light Sources in Polariscopic Measurements. Frederick Bates. (1906).
- + S 52 The Influence of Basic Lead Acetate on the Optical Rotation of Sucrose in Water Solution. Frederick Bates and J.C. Blake. (1907). J. Amer. Chem. Soc., Vol. 29, p. 286 (1907).
- + S 86 A Quartz Compensating Polariscopes with Adjustable Sensibility. Frederick Bates. (1907). Zeit. des Ver. der Deut. Zuckerind., Vol. 58, p. 105 (1908); Int. Sugar Jour., Vol. 9, p. 588 (1907); Amer. Sugar Ind., Vol. 13, p. 254 (1911).
- S 98 Remarks on the Quartz Compensating Polariscopes with Adjustable Sensibility. Frederick Bates. (1908). Price 5 cents.
- S 221 Influence of Atmospheric Conditions in the Testing of Sugars. Frederick Bates and Francis P. Phelps. (1914). Price 10 cents. Int. Sugar Jour., Vol. 16, p. 265 (1914); Zeit. des Ver. der Deut. Zuckerind., Vol. 64, p. 579 (1914); Sugar, Vol. 16, p. 40 (1914).
- + S 232 Equilibrium in the System; Lead Acetate, Lead Oxide, Water at 25°. Richard F. Jackson. (1914). J. Amer. Chem. Soc., Vol. 36, p. 2346 (1914).
- S 268 Constants of the Quartz-Wedge Saccharimeter and the Specific Rotation of Sucrose. 1. The Constants of the 26-Gram Normal Weight. Frederick Bates and Richard F. Jackson. (1916). Price 15 cents. Zeit. des Ver. der Deut. Zuckerind., Vol. 67, p. 347 (1917); Sugar, Vol. 18, pp. 242, 305, 365, 419 (1916); Sugar (Spanish), Vol. 18, pp. 279, 343, 456, 507, 552 (1916); Record of Hawaiian Chemists Ass'n., 1917.
- S 293 The Saccharimetric Normal Weight and Specific Rotation of Dextrose. Richard F. Jackson. (1916). Price 10 cents.

1. The following information was obtained from the records of the National Archives and Records Administration, Department of the Interior, Bureau of Land Management, Alaska Division, Fairbanks, Alaska, on the subject of the above-captioned matter:

- S 298 Standard Substances for the Calibration of Viscometers. Eugene C. Bingham and Richard F. Jackson. (1917). Price 5 cents.
- + S 358 Concerning the Annealing and Characteristics of Glass. A.Q. Tool and J. Valasek. (1920). Price 10 cents.
- S 371 A New Cadmium-Vapor Arc Lamp. Frederick Bates. (1920). Price 5 cents. Phil. Mag., Vol. 39, p. 353 (1920).
- + S 375 The Double Polarization Method for Estimation of Sucrose and the Evaluation of the Clerget Divisor. Richard F. Jackson and Clara L. Gillis. (1920). Price 10 cents. Zeit. des Ver. der Deutschen Zuckerind., Vol. 70, p. 521 (1920); Int. Sugar Jour., Vol. 22, pp. 509, 570, 638 (1920); abridged in Sugar, Vol. 22, pp. 604, 643 (1920).
- S 416 Preparation of Galactose. E.P. Clark (1921). Price 5 cents. J. Biol. Chem., Vol. 47, p. 1 (1921).
- S 429 Note on the Preparation of Mannose. E.P. Clark. (1922). Price 5 cents. J. Biol. Chem., Vol. 51, p. 1 (1922).
- S 432 An Improved Method for Preparing Raffinose. E.P. Clark. (1922). Price 5 cents. J. Amer. Chem. Soc., Vol. 44, p. 210 (1922).
- S 437 The Solubility of Dextrose in Water. Richard F. Jackson and Clara Gillis Silsbee. (1922). Price 5 cents.
- S 459 The Structure of Fucose. E.P. Clark. (1922). Price 5 cents. J. Biol. Chem., Vol. 54, p. 65 (1922).
- S 519 Preparation of Levulose. Richard F. Jackson, Clara Gillis Silsbee and Max J. Proffitt. (1926). Price 10 cents. Planter & Sugar Manuf., Vol. 76, pp. 230-2, 248-50, 268-70, 289-90 (1926); Facts About Sugar, Vol. 21, p. 326 (1926) (a review by O.W. Willcox); Sugar, Vol. 28, pp. 170-172, 222-224, 326-329, 380-381 (1926); Jour. des Fabricants de Sucre, May 15, 1926 (translation of review taken from Facts About Sugar, Vol. 21, p. 326 (1926)).
- S 533 Relations Between Rotatory Power and Structure in the Sugar Group. Part I. (1 to 10). C.S. Hudson. (1926). Price 35 cents.
- S 557 A Suggested New Base Point on the Thermometric Scale and the $\alpha \rightleftharpoons \beta$ Inversion of Quartz. Frederick Bates and Francis P. Phelps. (1927). Price 5 cents.
- S 572 Cause and Removal of Certain Heterogeneities in Glass. L.W. Tilton, A.N. Finn, and A.Q. Tool. (1928). Price 10 cents.

- 2 335 Standard Substances for the Calibration of Viscometers.
Rudolf G. Wiegand and Richard T. Jackson. (1937).
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- 2 336 Concerning the Annealing and Crystallization of Glasses.
A.G. Tool and J. Volcker. (1930). Price 10 cents.
- 2 371 A New Calcium-Nitrate Acid Lamp. Frederick Bates. (1930).
Price 5 cents. Phil. Mag., Vol. 39, p. 231 (1930).
- 2 375 The Double Polarization Method for Estimation of Glycerol
and the Evaluation of the Glycerol Division. Richard T.
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531 (1930); 1st. 2nd. 3rd. Vol. 38, pp. 509, 510,
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- 2 418 Preparation of Gelatins. E.F. Clark (1931). Price 5 cents.
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- 2 439 Note on the Preparation of Mannose. E.F. Clark. (1932).
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- 2 439 An Improved Method for Preparing Mannose. E.F. Clark
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- 2 437 The Solubility of Dextrose in Water. Richard T. Jackson
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- 2 452 The Structure of Pectose. E.F. Clark. (1932). Price 5
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- 2 512 Preparation of Levulose. Richard T. Jackson, Clara Willis
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256 (1932) (a review by C.W. Willcox); Sugar, Vol. 38,
pp. 170-173, 253-254, 255-256 (1932); Jour. Soc.
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taken from Texts About Sugar, Vol. 21, p. 238 (1932).
- 2 523 Relations Between Rotatory Power and Refractive in the
Sugar Group. Part I. (1 to 10). C.E. Hudson. (1932).
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- 2 527 A Suggested New Base Point on the Thermodynamic Scale and
the Inversion of Quartz. Frederick Bates and
Francis P. Phelps. (1932). Price 5 cents.
- 2 575 Gases and Removal of Certain Heterogeneous in Glass.
L.W. Tilton, A.H. Finn, and A.G. Tool. (1932). Price
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- + T 115 New Baumé Scale for Sugar Solutions. Frederick Bates and H.W. Bearce. (1918). Price 5 cents. Sugar, Vol. 20, p. 226 (1918).
- T 161 A Picnometer for the Determination of Density of Molasses. W.B. Newkirk. (1920). Price 5 cents. Int. Sugar Jour., Vol. 22, p. 708 (1920); Sugar, Vol. 22, p. 508 (1920).
- T 259 Saturation Relations in Mixtures of Sucrose, Dextrose, and Levulose. Richard F. Jackson and Clara Gillis Silsbee. (1924). Price 10 cents.
- T 338 Color in the Sugar Industry. I. Color Nomenclature in the Sugar Industry. II. Colorimetric Clarification of Turbid Sugar Solutions. H.H. Peters and F.P. Phelps. Price 20 cents. (1927). Part I published in Facts About Sugar, Vol. 20, p. 353 (1925); Planter and Sugar Manuf., Vol. 74, p. 288 (1925); Sugar, Vol. 27, p. 223 (1925); Zeit. des Ver. der Deut. Zuckerind., Vol. 75, p. 448 (1925).
- T 345 Determination of Weight Per Gallon of Blackstrap Molasses. Carl F. Snyder and L.D. Hammond. (1927). Price 5 cents. Planter & Sugar Manuf., Vol. 79, p. 268 (1927); Sugar, Vol. 31, p. 69 (1929).

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- C 44 Polarimetry (1918). Price 25 cents.
- C 145 Summary of Technical Methods for the Utilization of Molasses. Collated from Patent Literature. (1924). Price 15 cents.
- C 207 Recommended Specifications for Limestone, Quicklime, Lime Powder, and Hydrated Lime for Use in the Manufacture of Sugar. (1925). Price 5 cents.
- C 295 Temperature Corrections to Readings of Baumé Hydrometers, Bureau of Standards Baumé Scale for Sugar Solutions (Standard at 20°C.). (1926). Price 5 cents. Sugar, Vol. 29, p. 170 (1927); Chem. News, Vol. 132, p. 290 (1926); Planter and Sugar Manuf., Vol. 76, p. 331 (1926).
- C 375 Weights Per United States Gallon and Weights Per Cubic Foot of Sugar Solutions. Carl F. Snyder and Lester D. Hammond. (1929). Price 5 cents. Planter and Sugar Manuf., Vol. 82, p. 501 (1929); Facts About Sugar, Vol. 24, p. 714 (1929).

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- T 151 A Handbook for the Determination of Density of Molasses.
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- T 202 Separation Relations in Mixtures of Sucrose, Lactose, and
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- T 238 Color in the Sugar Industry. F. Edgar Macdonald in the
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- T 242 Determination of Weight per Gallon of Blackstrap Molasses.
Carl F. Snyder and L.D. Hammond. (1927). Price 5 cents.
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- C 14 Potentiometry (1918). Price 25 cents.
- C 146 Summary of Technical Methods for the Determination of Water
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- C 207 Recommended Specifications for Molasses, Technical, Pure
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- C 208 Temperature Corrections to Readings of Standard Hydrostatic
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- C 235 Weights for United States Gallon and Pounds for Ounce
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- 38 A Technical Method of Using the Mercury Arc to Obtain Data at Wave length 560 mu in the Spectrophotometric Analysis of Sugar Products. H.H. Peters and F.F. Phelps. Price 5 cents. B.S.J.R., Vol. 2, p. 335, February, 1929.
- 79 A Crystalline Diffructose Anhydride from Hydrolyzed Inulin. Richard F. Jackson and Sylvia M. Goergen. Price 5 cents. B.S.J.R., Vol. 3, p. 27, July, 1929.
- 82 Improvements in the Preparation of Aldonic Acids. C.S. Hudson and H.S. Isbell. Price 5 cents. B.S.J.R., Vol. 3, p. 57, July, 1929.
- 93 The Structure of Alpha-Methylxyloside. F.F. Phelps and C.B. Purves. Price 5 cents. B.S.J.R., Vol. 3, p. 247, August, 1929.
- 106 Two Isomeric Crystalline Compounds of d-Mannose with Calcium Chloride. J.K. Dale. Price 5 cents. B.S.J.R., Vol. 3, p. 459, September, 1929.

Research Notes

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28. A Technical Method of Using the Mercury Air to Oxygen Ratio at Wave Length 850 m in the Spectrophotometric Analysis of Paper Products. H. H. Tolson and T. L. Taylor. Price 5 cents. M.S.L.B., Vol. 2, p. 325, February, 1932.
29. A Grating Diffraction Apparatus with High Resolution. Richard E. Jackson and Edwin M. Guggen. Price 5 cents. M.S.L.B., Vol. 2, p. 37, July, 1932.
30. Experiments in the Preparation of Atomic Beams. C. E. Hudson and E. S. Jacoby. Price 5 cents. M.S.L.B., Vol. 2, p. 37, July, 1932.
31. The Structure of Algae-Morphology. C. E. Jacoby and C. E. Taylor. Price 5 cents. M.S.L.B., Vol. 2, p. 37, August, 1932.
32. Two Isomeric Crystallized Compounds of a Polymer with Ethylene Oxide. H. K. Galt. Price 5 cents. M.S.L.B., Vol. 2, p. 402, September, 1932.

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- The Application of the Clerget Method to Dilute Sucrose Solutions. R.F. Jackson and C.L. Gillis. Louisiana Planter and Sugar Manuf., Vol. 66, p. 141 (1921); Facts About Sugar, Vol. 12, p. 190 (1921); Int. Sugar Jour., Vol. 23, p. 217 (1921).
- The Complete Applicability of the Modified Clerget Method. R.F. Jackson and C.L. Gillis. Louisiana Planter and Sugar Manuf., Vol. 66, p. 390 (1921); Facts About Sugar, Vol. 13, p. 10 (1921); Int. Sugar Jour., Vol. 23, p. 448 (1921).
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- Certain Effects Produced by Chilling Glass. A.Q. Tool. J.O.S.A. & R.S.I., Vol. 8, p. 419 (1924).
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- Regulations Governing the Weighing, Taring, Sampling, Classification and Polarization of Imported Sugars and Molasses. Frederick Bates. Printed in U.S. Customs Regulations, 1923, Treasury Department, and printed as a separate for general distribution.
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- Part 2. The Halogen-acetyl Derivatives of a Ketose Sugar (d-Fructose). C.S. Hudson. J. Amer. Chem. Soc., Vol. 46, p. 477 (1924).
- Part 3. The Biose of Amygdalin (Gentiobiose) and Its Configuration. C.S. Hudson. J. Amer. Chem. Soc., Vol. 46, p. 483 (1924).
- Part 4. Two Isomeric Crystalline Hexa-Acetates of Dextro-Alpha Mannoheptose. C.S. Hudson and K.P. Monroe. J. Amer. Chem. Soc., Vol. 46, p. 979 (1924). (This work was done in 1918 in the Bureau of Chemistry but is reported here as a part of this series).
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- Part 7. The Methyl Glycosidic Derivatives of the Sugars. C.S. Hudson. J. Amer. Chem. Soc., Vol. 47, p. 268 (1925).
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- Part 3. The Bases of Anhydrosaccharose (Anhydroglucose) and its Constitution. C.S. Hudson. J. Amer. Chem. Soc., Vol. 46, p. 187 (1924).
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